

CLAIMS

1. An array substrate comprising:
a display area in which pixel electrodes are formed,
5 a scanning line arranged between the pixel electrodes,
a signal line crossing over the scanning line interposing an
insulating layer therebetween,
a terminal to which a scanning signal is applied, and
an extended scanning line formed from a conductive film for
10 connecting the scanning line with the terminal,
wherein the conductive film for the extended scanning line
and that for the scanning line are of different layers.

2. The array substrate of Claim 1 comprising:
15 an auxiliary capacitance line arranged in parallel to the
scanning line,
a collected auxiliary capacitance line arranged in parallel to
the signal line and electrically connected to the auxiliary capacitance
line,
20 a terminal to which a common signal is applied, and
an extended auxiliary capacitance line formed from a
conductive film for connecting the collected auxiliary capacitance line
with the terminal for the common signal,
wherein the conductive film for the extended auxiliary
25 capacitance line and that for the collected auxiliary capacitance line are
of different layers.

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3. An array substrate comprising:

a display area in which pixel electrodes are formed,
a scanning line arranged between the pixel electrodes,
an auxiliary capacitance line arranged in parallel to the
5 scanning line,

a signal line crossing over the scanning line and the auxiliary
capacitance line interposing an insulating layer therebetween,

a collected auxiliary capacitance line arranged in parallel to
the signal line and electrically connected to the auxiliary capacitance
10 line,

a terminal to which a common signal is applied, and

an extended auxiliary capacitance line formed from a
conductive film for connecting the collected auxiliary capacitance line
with the terminal,

15 wherein the conductive film for the extended auxiliary
capacitance line and that for the collected auxiliary capacitance line are
of different layers.

4. The array substrate of Claim 1, wherein the extended
20 scanning line and the signal line are formed from the conductive film of
same layer.

5. The array substrate of Claim 1, wherein the extended
scanning line and the pixel electrodes are formed from the conductive
25 film of same layer.

6. The array substrate of Claim 4, wherein the extended

scanning line is electrically connected to the scanning line at the neighborhood of the display area and electrically connected to the terminal for the scanning signal at the neighborhood of the terminal.

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7. The array substrate of Claim 2, wherein the extended auxiliary capacitance line and the signal line are formed from the conductive film of same layer.

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8. The array substrate of Claim 2, wherein the extended auxiliary capacitance line and the pixel electrodes are formed from the conductive film of same layer.

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9. The array substrate of Claim 7, wherein the extended auxiliary capacitance line is electrically connected to the collected auxiliary capacitance line at the neighborhood of the display area and electrically connected to the terminal for the common signal at the neighborhood of the terminal.

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10. The array substrate of Claim 2, wherein the auxiliary capacitance line, the corrected auxiliary capacitance line and the scanning line are formed from the conductive film of same layer.

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11. The array substrate of Claim 2, wherein the collected auxiliary capacitance line and the extended scanning line are crossing interposing a insulating layer therebetween.

12. The array substrate of Claim 1, wherein aluminum or

aluminum alloy is used for material of the scanning line.

13. The array substrate of Claim 1, wherein partly or wholly nitridated aluminum or partly or wholly nitridated aluminum alloy is used for material of the scanning line.

14. The array substrate of Claim 1, wherein high melting point metal such as Cr or Mo is used for material of the signal line.

15. The array substrate of Claim 1, wherein the scanning line and the extended scanning line are electrically connected via a conductive film of the same layer as that for the pixel electrode.

16. The array substrate of Claim 2, wherein the collected auxiliary capacitance line and the extended auxiliary capacitance line are electrically connected via a conductive film of the same layer as that for the pixel electrode.

17. The array substrate of Claim 1, wherein either of the scanning line or the extended scanning line is formed in a grid or ladder like shape at a region in which the scanning line and the extended scanning line are overlapped within a connecting portion between the scanning line and the extended scanning line.

18. The array substrate of Claim 2, wherein either of the collected auxiliary capacitance line or the extended auxiliary capacitance line is formed in a grid or ladder like shape at a region in

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which the collected auxiliary capacitance line and the extended auxiliary capacitance line are overlapped within a connecting portion between the collected auxiliary capacitance line and the extended auxiliary capacitance line.

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19. A display device equipped with the array substrate of Claim 1, wherein liquid crystal is interposed between the array substrate and a counter substrate having a common electrode and a color filter.

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20. A manufacturing method for an array substrate comprising steps of:

depositing a conductive film and forming a scanning line, which is arranged between pixel electrodes, therefrom,

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depositing a conductive film of another layer of the scanning line and forming an extended scanning line for connecting the scanning line with a terminal to which scanning signal is applied, therefrom, and

forming an insulating film which is arranged between the scanning line and the extended scanning line and insulates the scanning line from the extended scanning line.

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21. A manufacturing method for an array substrate comprising steps of:

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depositing a conductive film and forming a scanning line arranged between pixel electrodes, an auxiliary capacitance line arranged in parallel to the scanning line and a collected auxiliary capacitance line connected to the auxiliary capacitance line, therefrom, depositing a conductive film of another layer of the scanning

line, the auxiliary capacitance line and the collected auxiliary capacitance line and forming an extended auxiliary capacitance line for connecting the collected auxiliary capacitance line with a terminal to which common signal is applied, therefrom, and

- 5 forming an insulating film which is arranged between the extended auxiliary capacitance line and the scanning line, the auxiliary capacitance line or the extended scanning line and insulates the extended auxiliary capacitance line from the scanning line, the auxiliary capacitance line and the collected auxiliary capacitance line.

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